## AMENDMENT TO THE CLAIMS

1. (Currently amended) A method of inhibiting delivery of atrial therapy, comprising:

developing atrial intervals and ventricular intervals from sensed atrial and ventricular events, respectively;

computing a representative atrial interval rate and a representative ventricular interval rate using a predetermined number of the atrial and ventricular intervals, respectively;

calculating an average atrial rate and an average ventricular rate using the representative atrial and ventricular interval rates, respectively; and

inhibiting delivery of atrial therapy if the average atrial rate exceeds an atrial arrhythmia threshold and the average atrial rate fails to exceed the average ventricular rate by at least a predetermined factor.

2. (Original) The method of claim 1, wherein calculating the average atrial and ventricular rates comprises calculating the average atrial and ventricular rates on a beat per minute basis using the representative atrial and ventricular interval rates.

3. (Original) The method of claim 1, wherein the predetermined number of the atrial and ventricular intervals is between 4 and 60 of the most recent atrial and ventricular intervals, respectively.

4. (Original) The method of claim 1, wherein the predetermined number of the atrial and ventricular intervals is about 10, respectively.

5. (Original) The method of claim 1, wherein the predetermined factor is at least 105 percent.

6. (Original) The method of claim 1, wherein:

calculating the average atrial and ventricular rates further comprises calculating the average atrial and ventricular rates on a beat per minute basis using the representative atrial and ventricular interval rates; and

the predetermined factor is between 10 and 30 beats per minute.

7. (Original) The method of claim 1, wherein:

calculating the average atrial and ventricular rates further comprises calculating the average atrial and ventricular rates on a beat per minute basis using the representative atrial and ventricular interval rates; and

the predetermined factor is about 20 beats per minute.

8. (Original) The method of claim 1, wherein the representative atrial and ventricular interval rates are computed by computing an average of the predetermined number of the atrial and ventricular intervals, respectively.

9. (Original) The method of claim 1, wherein the representative atrial and ventricular interval rates are computed by computing a median of the predetermined number of the atrial and ventricular intervals, respectively.

10. (Original) The method of claim 1, wherein the representative atrial and ventricular interval rates are computed by computing a mean of the predetermined number of the atrial and ventricular intervals, respectively.

11. (Original) The method of claim 1, further comprising enabling delivery of atrial therapy if the average atrial rate exceeds the average ventricular rate by at least the predetermined factor.

12. (Currently amended) A method of inhibiting delivery of atrial therapy, comprising:

developing atrial intervals and ventricular intervals from sensed atrial and ventricular events, respectively;

calculating an average atrial rate and an average ventricular rate developed from a predetermined number of the atrial and ventricular intervals, respectively; and

inhibiting delivery of atrial therapy if the average atrial rate exceeds an atrial arrhythmia threshold and the average atrial rate fails to exceed the average ventricular rate by at least a predetermined factor.

13. (Original) The method of claim 12, wherein calculating the average atrial and ventricular rates further comprises calculating the average atrial and ventricular rates on a beat per minute basis using an average of the predetermined number of the atrial and ventricular intervals, respectively.

14. (Original) The method of claim 12, wherein calculating the average atrial and ventricular rates further comprises calculating the average atrial and ventricular rates on a beat per minute basis using a median of the predetermined number of the atrial and ventricular intervals, respectively.

15. (Original) The method of claim 12, wherein calculating the average atrial and ventricular rates further comprises calculating the average atrial and ventricular rates on a beat per minute basis using a mean of the predetermined number of the atrial and ventricular intervals, respectively.

16. (Original) The method of claim 12, wherein calculating the average atrial and ventricular rates comprises calculating the average atrial and ventricular rates using a number n of the atrial intervals and a number m of the ventricular intervals developed during a predetermined time period.

17. (Original) The method of claim 12, wherein calculating the average atrial and ventricular rates comprises calculating the average atrial and ventricular rates using a first time period during which a number n of the atrial intervals is developed and a second time period during which a number m of the ventricular intervals is developed.

18. (Original) The method of claim 12, wherein the predetermined number of the atrial and ventricular intervals is between 4 and 60 of the most recent atrial and ventricular intervals, respectively.

19. (Original) The method of claim 12, wherein the predetermined number of the atrial and ventricular intervals is about 10, respectively.

20. (Original) The method of claim 12, wherein the predetermined factor is at least 105 percent.

21. (Original) The method of claim 12, wherein:

calculating the average atrial and ventricular rates further comprises calculating the average atrial and ventricular rates on a beat per minute basis using an average of the predetermined number of the atrial and ventricular intervals; and

the predetermined factor is between 10 and 30 beats per minute.

22. (Original) The method of claim 12, wherein:

calculating the average atrial and ventricular rates further comprises calculating the average atrial and ventricular rates on a beat per minute basis using an average of the predetermined number of the atrial and ventricular intervals; and

the predetermined factor is about 20 beats per minute.

23. (Original) The method of claim 12, further comprising enabling delivery of atrial therapy if the average atrial rate exceeds the average ventricular rate by at least the predetermined factor.

24. (Currently amended) A body implantable system, comprising:

at least one lead comprising atrial and ventricular electrodes;

a detector, coupled to the at least one lead, that senses atrial events and ventricular events; and

a control circuit coupled to the detector, the control circuit calculating an average atrial rate and an average ventricular rate developed from a predetermined number of the atrial and ventricular intervals, respectively, the control circuit inhibiting delivery of atrial therapy if the average atrial rate exceeds an atrial arrhythmia threshold and the average atrial rate fails to exceed the average ventricular rate by at least a predetermined factor.

25. (Original) The system of claim 24, wherein the control circuit calculates the average atrial and ventricular rates on a beat per minute basis using an average of the predetermined number of the atrial and ventricular intervals, respectively.

26. (Original) The system of claim 24, wherein the control circuit calculates the average atrial and ventricular rates on a beat per minute basis using a median of the predetermined number of the atrial and ventricular intervals, respectively.

27. (Original) The system of claim 24, wherein the control circuit calculates the average atrial and ventricular rates on a beat per minute basis using a mean of the predetermined number of the atrial and ventricular intervals, respectively.

28. (Original) The system of claim 24, wherein predetermined number of the atrial and ventricular intervals is between 4 and 60 of the most recent atrial and ventricular intervals, respectively.

29. (Original) The system of claim 24, wherein the predetermined number of the atrial and ventricular intervals is about 10, respectively.

30. (Original) The system of claim 24, wherein the predetermined factor is at least 105 percent.

31. (Original) The system of claim 24, wherein the control circuit calculates the average atrial and ventricular rates on a beat per minute basis using an average of the predetermined number of the atrial and ventricular intervals, and the predetermined factor is between 10 and 30 beats per minute.

32. (Original) The system of claim 24, wherein the control circuit calculates the average atrial and ventricular rates on a beat per minute basis using an average of the predetermined number of the atrial and ventricular intervals, and the predetermined factor is about 20 beats per minute.

33. (Original) The system of claim 24, wherein the control circuit enables delivery of atrial therapy if the average atrial rate exceeds the average ventricular rate by at least the predetermined factor.

34. (New) A method of inhibiting delivery of atrial therapy, comprising:

developing atrial intervals and ventricular intervals from sensed atrial and ventricular events, respectively;

calculating an atrial rate and a ventricular rate developed from the atrial and ventricular intervals, respectively;

inhibiting delivery of atrial therapy if the atrial rate exceeds an atrial arrhythmia threshold and the average atrial rate fails to exceed the ventricular rate by at least a predetermined factor;

enabling atrial therapy delivery, subsequent to inhibiting atrial therapy delivery, if the atrial rate exceeds the ventricular rate by at least the predetermined factor; and

delivering atrial therapy if atrial therapy delivery is enabled and at least one atrial arrhythmia detection process indicates atrial therapy delivery should be delivered.

35. (New) The method of claim 34, wherein the at least one atrial arrhythmia detection process comprises:

developing atrial and ventricular interval rates from the sensed atrial and ventricular events, respectively;

classifying atrial interval rates in an atrial window, the atrial window having a first length and a first satisfaction criterion;

classifying ventricular interval rates in a ventricular window, the ventricular window having a second length and a second satisfaction criterion, the second length of the ventricular window differing from the first length of the atrial window to enhance detection of ventricular arrhythmias relative to atrial arrhythmia detection; and

declaring an atrial episode in response to satisfying the atrial window by comparing classified atrial interval rates to the first satisfaction criterion.

36. (New) The method of claim 35, wherein the first length of the atrial window is greater than the second length of the ventricular window.

37. (New) The method of claim 35, further comprising verifying that the declared atrial episode is a sustained atrial episode in response to the atrial window being satisfied by a third satisfaction criterion for subsequent atrial interval rates.

38. (New) The method of claim 34, wherein calculating the atrial and ventricular rates comprises calculating an average atrial rate and an average ventricular rate developed from the atrial and ventricular intervals, respectively.

39. (New) The method of claim 34, wherein calculating the atrial and ventricular rates comprises calculating an average atrial rate and an average ventricular rate developed from a predetermined number of the atrial and ventricular intervals, respectively, further wherein the predetermined number of the atrial and ventricular intervals is between 4 and 60 of the most recent atrial and ventricular intervals, respectively.

40. (New) The method of claim 34, wherein the predetermined factor is at least 105 percent.

41. (New) The method of claim 34, wherein calculating the atrial and ventricular rates comprises calculating an average atrial rate and an average ventricular rate from the atrial and ventricular intervals, respectively, and the average atrial and ventricular rates are calculated on a beat per minute basis using an average, mean, or median of the atrial and ventricular intervals, respectively.

42. (New) The method of claim 34, wherein calculating the atrial and ventricular rates further comprises calculating an average atrial rate and an average

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ventricular rate using a number n of the atrial intervals and a number m of the ventricular intervals developed during a predetermined time period.